

ABSTRACT

A method of designing an exposure mask for exposing an image forming layer provided on a substrate, by use of near field light leaking from adjoining openings formed in a light blocking member. The method includes determining a width D of the openings and an opening interval of the openings to be formed in the light blocking member, in which a relation $D \leq (P - W - 2T)$ is satisfied where T is the height of a pattern to be produced by the image forming layer, W is the linewidth of the pattern and P is the pitch of the pattern, so that an electrical field distribution, adjacent to the opening of the light blocking member as exposure light is projected on the light blocking member, is approximated to an electrical field model extending concentric-circularly with an edge of the light blocking member at an image forming layer side as a center.